ABSTRACT OF THE DISCLOSURE

The utilization of the capacity of a data transmission system (e.g., a MOST vehicle network) is improved in the event that the operating frequency and channel width of the system do not match the word frequency and word width of the digitized signal. The data words of the digitized signal are decomposed into partial words with a smaller width than that of the channels on which they are transmitted. Consequently, in each individual channel there remains a residual transmission capacity that makes it possible to transmit an identifier for each individual transmitted partial data word. A data sink, connected to the transmission system, uses this identifier to obtain information about the position of the respective partial data word in its original data word. This identifier may be one bit (i.e., a Boolean signal). Even if the number of partial data words into which each original data word is decomposed may be greater than two, a single bit is sufficient for example to distinguish every first or every last partial data word from all the other partial data words of a data word, and thus to deliver to the sink a fixed point from which it can begin to reconstruct the original data words.